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NOTES ON THE SALTICIDAE (ARANEI) OF
THE CAPE VERDE ISLANDS

The Spider fauna of the Cape Verde Archipelago is relatively poorly known. Data on the Salticidae of the islands are given in BLACKWALL (1865), SIMON (1883), BERLAND (1936), ASSMUTH and GROH (1982). So far only six species were reported i.e. *Bianor albobimaculatus*, *B. simplex*, *Hasarius adansoni*, *Menemerus bivittatus*, *Plexippus lepidus* (affiliation of this species to the genus *Plexippus* seems dubious) and *Dendryphantes sedulus*. Identification of the latter species is, however impossible, due to inadequate description and loss of type specimens. Additionally ASSMUTH and GROH (1982) report from the islands two unidentified *Bianor* spp. (correct identification of these species seems however currently, without previous revision of the whole genus) as well as unidentified species of the Salticid.

This paper contains descriptions of five species from the Archipelago; two of them are newly described. It is based on materials collected by L. Fea in 1898. These materials are kept in Museo Civico di Storia Naturale "Giacomo Doria" in Genova. I owe an opportunity to study this collection to Dr. Gianna Arbocco, curator of this Museum. I warmly acknowledge her help.

I am also grateful to Dr. A. van Harten for his critical remarks and help in tracking hardly accessible references.

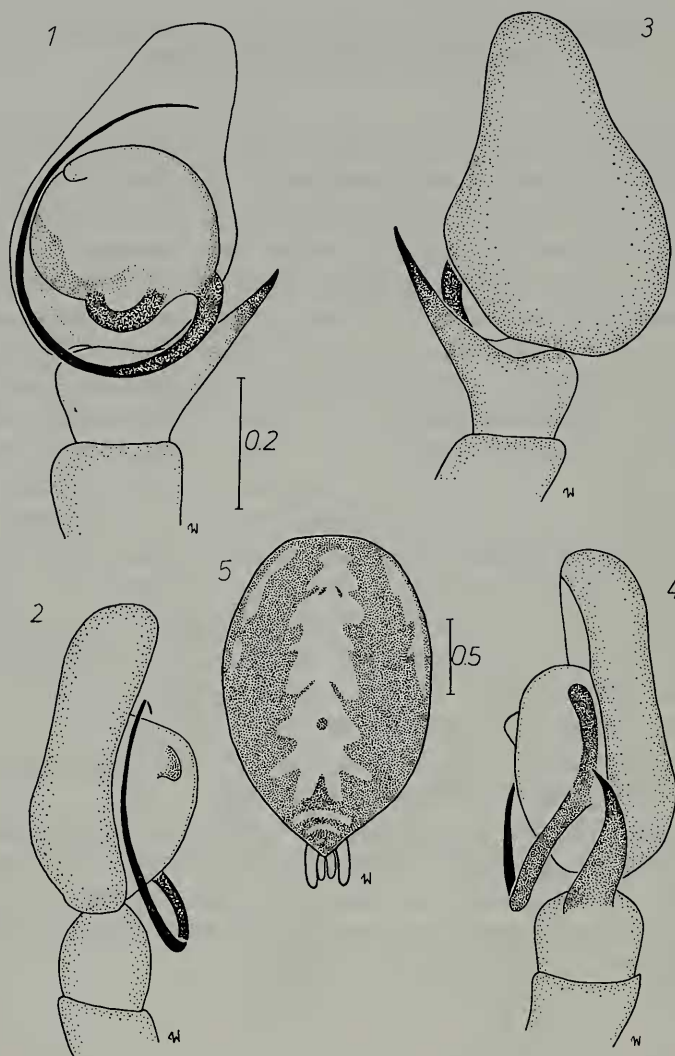
Judging from the hitherto existing fragmentary data one can only tentatively conclude that the Salticidae of the Archipelago consist of a mixture of cosmopolitan species and of insular endemits. Assessment of relationships between the latter and species inhabiting African mainland would demand further studies.

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«*Baryphas*» *dubius* sp. n.

(figs 1-5)

Material: Is. Cape Verde - 1 ♂ (holotype); São Tiago, Orgaos Grande - 1 ♂ (paratype).



Figs 1-5. «*Baryphas*» *dubius* sp. n., holotype: 1-4 male copulatory organ ventral, lateral and dorsal views, 5 - abdominal pattern.

Male. Carapace dark brown, near eyes black, eye field with metallic shine, behind eye field lighter median stripe. Very scarce white and brown hairs on carapace, in vicinity of eyes more numerous long brown bristles. Length of cephalothorax 2.3, length of eye field 1.0, width of eye field I and III 1.4. Clypeus very narrow with white hairs. Chelicerae brown, retromargin with single and promargin with two teeth. Maxillae brown with yellow margins, labium brown, sternum orange-yellow. Abdomen dark brown with median irregular yellow stripe and white longitudinal patches laterally (fig. 5). Abdomen covered sparsely with short light hairs, at anterior margin long brown bristles. Ventrally abdomen dark with two narrow light lines laterally. Length of abdomen 1.9. Spinnerets yellow. Legs brown, their hairs and spines brown. Pedipalps brown. Bulbus convex with small protuberance opposite base of embolus (fig. 1). Embolus long and slender (figs 1-2). Single long almost straight tibial apophysis (figs 3-4).

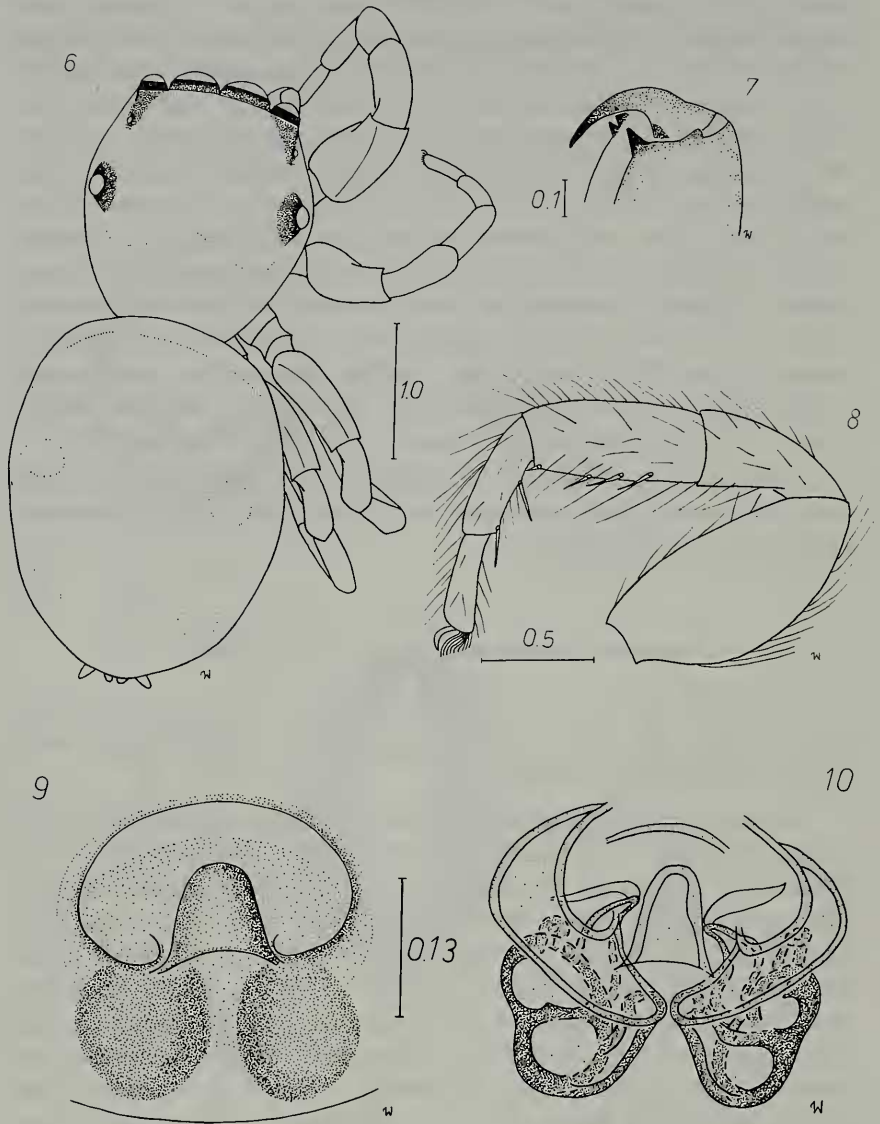
The species is tentatively included in the *Baryphas*; structure of its male copulatory organ resembles that of *Baryphas woodii* (PECKHAM, 1903) from South Africa.

***Bianor albobimaculatus* (Lucas, 1846)**

(figs 6-10)

Material: São Tiago, Orgaos Grande - 3 ♀♀; [São Tiago], Pedra Badejo, IV-V 1898 - 2 ♀♀.

Female. Dorsal aspect (fig. 6). Cephalothorax flattened, much swollen in the area of eyes III, rusty-brown. Eye field large, surrounding of eyes black. In vicinity of eyes long brown setae. Laterally carapace with scarce short white hairs, similar hairs behind eye field. Length of cephalothorax 1.9, length of eye field 1.0-1.1, width of eye field I 1.2, width of eye field III 1.6-1.7. Clypeus narrow with long white hairs. Chelicerae brown, postmargin with two teeth, retromargin with single tooth (fig. 7). Maxillae, labium and sternum light brown, on sternum a few brown hairs. Abdomen rounded, pale brown with narrow light band at anterior margin which extends to the sides and two pairs, of round spots. Whole abdomen covered with light and brown hairs, at anterior margin hairs longer and bushier. Ventrally abdomen clear. Length of abdomen 2.5-2.7. Spinnerets brown. Legs I dark brown, thick (fig. 8), remaining legs lighter, their hairs and spines



Figs 6-10. *Bianor albomaculatus*, female: 6 - general appearance, 7 - cheliceral dentition, 8 - first leg, 9-10 - epigyne and its internal structure.

brown. Pedipalps orange covered with dense hairs. Epigyne small, rounded, with central pocket and translucent spermathecae (fig. 9). Its internal structure shown in fig. 10.

SIMON (1883) reported this species from the Cape Verde Islands.

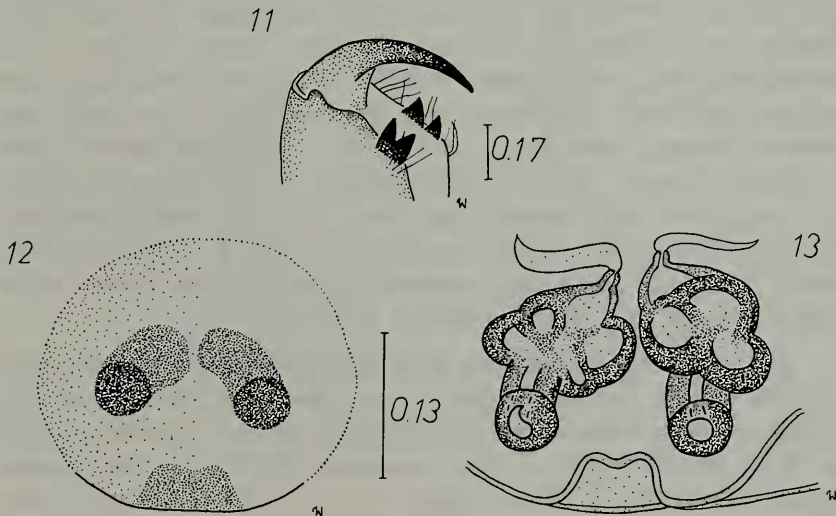
The species identification tentative, as no precise diagnoses of the *Bianor* species are available in the literature.

***Hasarius adansoni* (Savigny et Audouin, 1825)**

(figs 11-13)

Material: São Nicolau, X-XII 1898 - 4 ♀♀.

Female. Carapace rather convex, brown. Eye field darker, near eyes black, behind eye field large lighter semicircular area. Very sparse brown and white hairs cover the carapace. Brown hairs more numerous on eye field, chiefly around eyes. Length of cephalothorax 3.0-3.2, length of eye field 1.4-1.6, width of eye field I 1.7-2.0, width of eye field III 1.8-2.0. Clypeus narrow, brown. Chelicerae dark brown, promargin with two teeth, retromargin with single two-cleft tooth (fig. 11).



Figs 11-13. *Hasarius adansoni*: 11 - cheliceral dentition, 12-13 - epigyne and its internal structure.

Maxillae and labium brown with lighter margins. Sternum light brown. Abdomen yellowish-grey, laterally darker, anteriorly with long brown hairs. Length of abdomen 3.9-4.5. Spinnerets grey. Legs pale brown, covered sparse brown hairs. Spines brown. Epigyne very small, round, with two openings (fig. 12). Copulatory canals straight, spermathecae heavily sclerotized, composed of few chambers (fig. 13). Near the epigastric furrow a dichotomous pocket.

Cosmopolitan species reported from the Cape Verde Islands by BERLAND (1936).

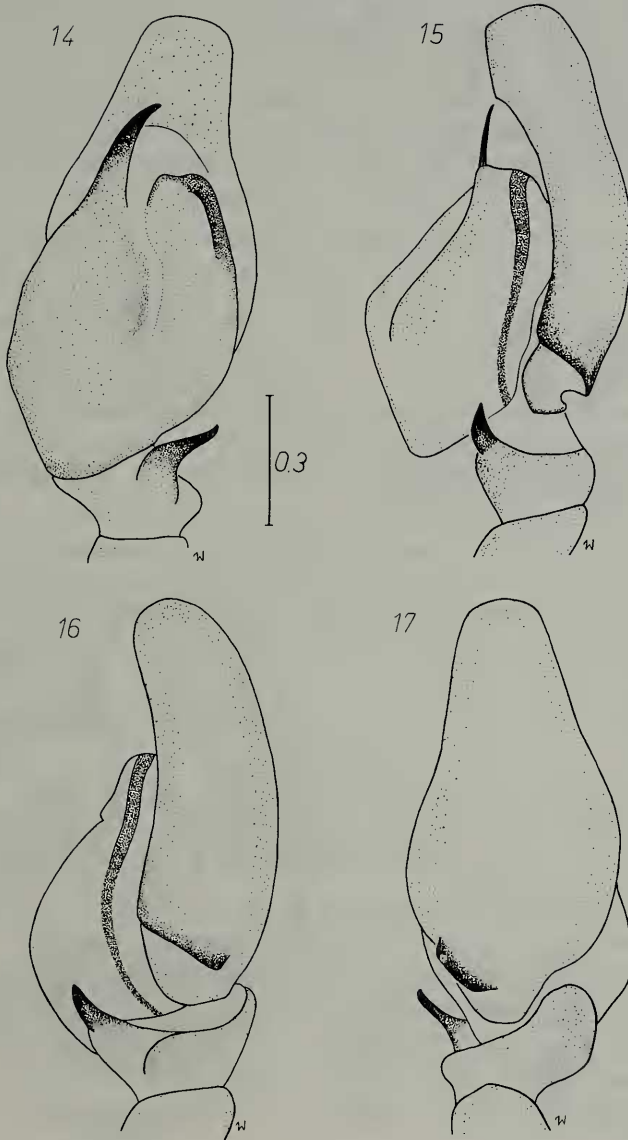
Menemerus bivittatus (Dufour, 1831)

(figs 14-20)

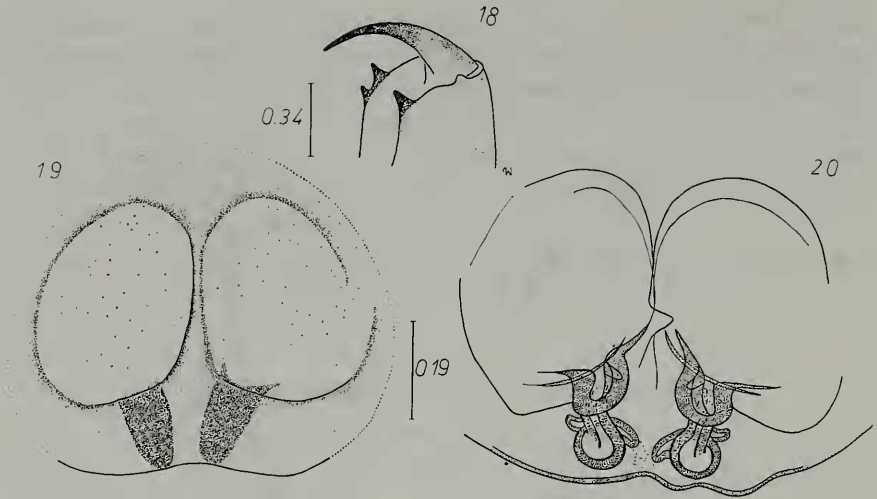
Material: Boa Vista, I-II 1898 - 1 ♂, 1 ♀; [Fogo], São Filipe, VI-VII 1898 - 1 ♀.

Male. Carapace dark brown, eye field darker, eyes surrounded black, covered all over with short white hairs, especially densely on sides. In vicinity of eyes numerous brown long setae. Length of cephalothorax 3.3, length of eye field 1.3, width of eye field I 1.7, width of eye field III 1.6. Clypeus narrow with dense white hairs. Chelicerae dark brown, retromargin with single and promargin with two teeth. Maxillae and labium dark brown, sternum lighter. Abdomen yellowish-grey with broad brown median streak and two large light patches posteriorly. Abdomen with few long light hairs and, near anterior margin, with longer and denser protruding brown hairs. Ventrally abdomen light. Length of abdomen 3.4. Spinnerets grey. Legs pale brown, only femora of legs I and II darker. Hairs of legs long, light. Legs I somewhat greater than remainings ones, their hairs brown, dense. Pedipalps large, dark orange. Tibial apophysis short, thick, almost straight (figs 14-17), embolus short (fig. 14).

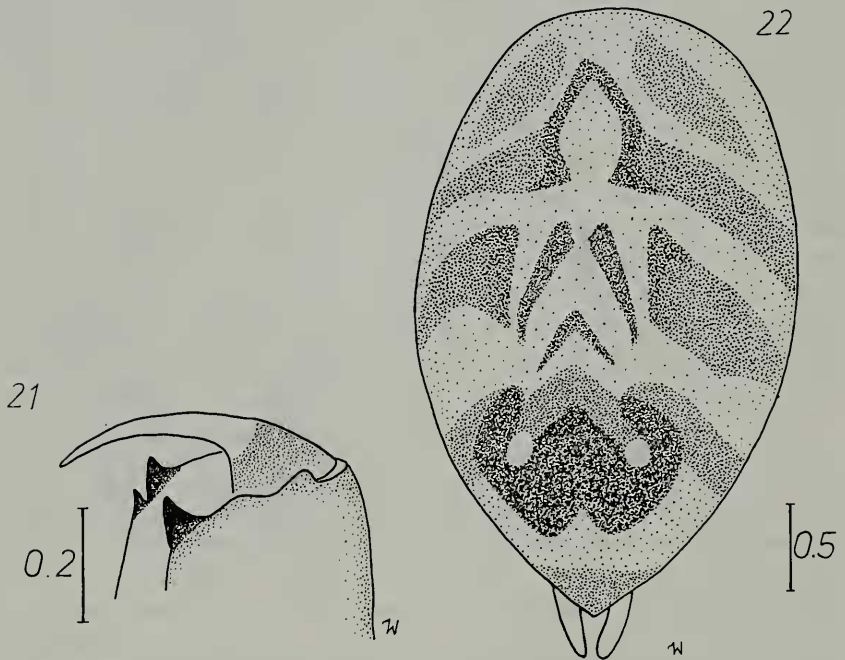
Female. Eye field black with metallic shine, remaining part of carapace brown with large light semicircular area behind eye field. Whole carapace covered with diminutive white hairs, laterally and on eye field hairs numerous. Eyes surrounded with long brown setae. Cephalothorax length 3.2-3.4, length of eye field 1.4, width of eye field I and III 1.7. Chelicerae (fig. 18) as in male. Clypeus narrow, white. Maxillae dark brown with yellow margins, labium dark brown. Sternum light brown. Abdomen elongated, central part yellow, laterally



Figs 14-17. *Menemerus bivittatus* - male copulatory organ ventral, lateral and dorsal views.



Figs 18-20. *Menemerus bivittatus*: 18 - cheliceral dentition, 19-20 - epigyne and its internal structure.



Figs 21-22. *Luxuria lymphatica* sp. n., paratype: 21 - cheliceral dentition, 22 - abdominal pattern.

brown. Whole abdomen, especially the front margin, covered with brown long hairs. Ventrally abdomen pale yellow. Length of abdomen 5.2. Spinnerets brownish-grey. Legs yellow-orange covered with long light hairs. Spines brown. Pedipalps yellow-orange. Epigyne rather large, round with great depression partially separated with narrow triangular process (fig. 19). The depression plugged with waxy secretion. Copulatory openings very strongly sclerotized, canals short, spermathecae more or less spherical (fig. 20).

This cosmopolitan species was already reported from the Cape Verde Islands by BERLAND (1936).

Luxuria gen.n.

Only one species of the genus has been found. The structure of female copulatory organs in the type species allow one to differentiate it from other genera of the Salticidae. Epigyne with rather distant copulatory openings. The openings lead to very long loop-shaped convoluted canals which run into large, many-chambered, strongly sclerotized spermathecae. Internal structure of the epigyne slightly resembles that of the *Bacelarella* (BERLAND et MILLOT, 1941) described from Guinea and Ivory Coast (cfr. also PRÓSZYŃSKI, 1987, p. 4).

Luxuria lymphatica sp.n.

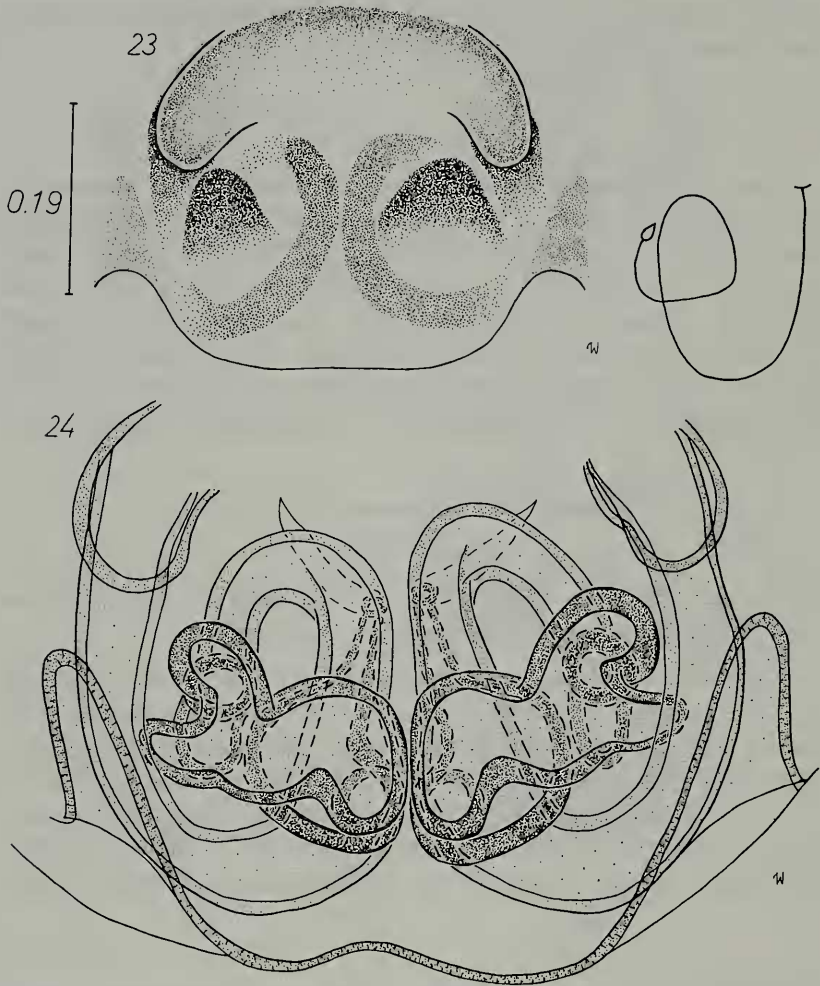
(figs 21-24)

Material: Is. Cape Verde, [Brava]*, IX 1898 - 3 ♀♀ (the largest one - holotype, the remaining ones - paratypes).

Female. Carapace rounded, brown, near eyes black. There are numerous short white hairs on carapace, also a few long brown ones. Around eyes longer brown setae. Length of cephalothorax 2.5-2.7, length of eye field 1.2, width of eye field I 1.5-1.6, width of eye field III 1.6-1.7. Clypeus narrow, brown. Chelicerae light brown, promargin with two teeth, retromargin with single tooth (fig. 21). Maxillae brown with yellow margins, labium brown, sternum yellow. Abdomen elong-

* Though is no locality given on the label, yet in September 1898, L. Fea stayed on the Brava island (FEA, 1899).

ated, yellowish with russet pattern, posteriorly pair of white round little spots surrounded from behind by large brownish-black patch (fig. 22). Abdomen covered with short brown and white hairs. Ventrally abdomen pale yellow. Length of abdomen 2.6-3.3. Spinnerets yellow. Legs orange-yellow covered with long light hairs, spines brown. Pedipalps orange-yellow, their hairs light, long. Epigyne rounded with translucent spermathecae (fig. 23), near the epigastric furrow two



Figs 23-24. *Luxuria lymphatica* sp. n., paratype - epigyne and its internal structure.

narrow pockets. Internal structure of epigyne (fig. 24) is fairly complicated, canals long loop-shaped, spermathecae heavily sclerotized.

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SUMMARY

The paper contains descriptions and taxonomic drawings of five Salticidae species from the Cape Verde Archipelago. Two of them and one genus: *Luxuria* are described as new.

RIASSUNTO

Sono descritte e dettagliatamente figurate, cinque specie di Ragni Salticidi dell'Arcipelago del Capo Verde. Due di esse ed un genere: *Luxuria* sono descritti come nuovi.